TOXICON

Volume 74 November 2013

CONTENTS

Papers

T. Wang, Q. He, L. Xiao, Q. Wang, B. Zhang, B. Wang, G. Liu, J. Zheng, B. Yu and L. Zhang	1	Mitochondrial dysfunction contributes to the cytotoxicity induced by tentacle extract from the jellyfish *Cyanea capillata* in rat renal tubular epithelial NRK-52E cells
M.A. Rodrigues, M.P. Reis and M.C. Mateus	8	Liquid chromatography/negative electrospray ionization ion trap MS^2 mass spectrometry application for the determination of microcystins occurrence in Southern Portugal water reservoirs
R.S. Alves, R.M. Ximenes, A.R.C. Jorge, N.R.F. Nascimento, R.D. Martins, M.M. Rabello, M.Z. Hernandes, D.O. Toyama, M.H. Toyama, A.M.C. Martins, A. Havt and H.S.A. Monteiro	19	Isolation, homology modeling and renal effects of a C-type natriuretic peptide from the venom of the Brazilian yellow scorpion (*Tityus serrulatus*)
S. Khor, S.A. Wood, L. Salvitti, N.L.C. Ragg, D. Taylor, P. McNabb and S.C. Cary	27	Development of a non-lethal biopsy technique for estimating total tetrodotoxin concentrations in the grey side-gilled sea slug *Pleurobranchaea maculata*
Y. Zhang, L. Zhong, B. Zhou, J.-y. Chen and C.-m. Li	34	Interaction of characteristic structural elements of persimmon tannin with Chinese cobra PLA_2
S. Wolz-Richter, K.-H. Esser and A. Hess	44	Antinociceptive activity of crotoxin in the central nervous system: A functional Magnetic Resonance Imaging study
P.-C. Tsai, C.-L. Chu, C.-C. Chiu, L.-S. Chang and S.-R. Lin	56	Inhibition of Src activation with cardiotoxin III blocks migration and invasion of MDA-MB-231 cells
H.K. Abbas, T. Yoshizawa and W.T. Shier	68	Cytotoxicity and phytotoxicity of trichothecene mycotoxins produced by *Fusarium* spp.
A. Sieroslawska	76	Assessment of the mutagenic potential of cyanobacterial extracts and pure cyanotoxins
J.A. Vrana, N. Boggs, H.N. Currie and J. Boyd	83	Amelioration of an undesired action of deguelin
H.L. Gomes, F. Andrich, C.L. Fortes-Dias, J. Perales, A. Teixeira-Ferreira, D.V. Vassallo, J.S. Cruz and S.G. Figueiredo	92	Molecular and biochemical characterization of a cytolysin from the *Scorpaena plumieri* (scorpionfish) venom: Evidence of pore formation on erythrocyte cell membrane
L.V. Boyer, P.B. Chase, J.A. Degan, G. Figge, A. Buelna-Romero, C. Luchetti and A. Alagón	101	Subacute coagulopathy in a randomized, comparative trial of Fab and $F(ab')_2$ antivenoms

Continued on inside back cover

Available online at www.sciencedirect.com

ScienceDirect

For a full and complete Guide for Authors, please use: http://www.elsevier.com/locate/toxicon/

Indexed/abstracted in: *Current Cont. ASCA, Biosis Data., CAB Inter., Cam. Sci. Abstr., Chemical Abstracts Service, Curr. Cont./Life Sci., Elsevier BIOBASE/Current Awareness in Biological Sciences, EMBASE/Excerpta Medica, Curr. Cont. Thomson Scientific/BIOMED Database, PASCAL-CNRS Data., Curr. Cont. Sci. Cit. Ind., Curr. Cont. SCISEARCH Data., Ind. Med. Also covered in the abstract and citation database Scopus®. Full text available on ScienceDirect®.*

http://www.elsevier.com/locate/toxicon/

ELSEVIER

0041-0101(20131174;1-Y

ISSN 0041-0101

74 1–224 (2013)

TOXICON

CONTENTS—*Continued from outside back cover*

K. Kato, N. Akaike, T. Kohda, Y. Torii, Y. Goto, T. Harakawa, A. Ginnaga, R. Kaji and S. Kozaki	109	Botulinum neurotoxin A2 reduces incidence of seizures in mouse models of temporal lobe epilepsy
M.E. Girón, B. Guerrero, A.M. Salazar, E.E. Sánchez, M. Alvarez and A. Rodríguez-Acosta	116	Functional characterization of fibrinolytic metalloproteinases (colombienases) isolated from *Bothrops colombiensis* venom
K. Suktham, W. Pathaichindachote, B. Promdonkoy and C. Krittanai	130	Essential role of amino acids in αD–β4 loop of a *Bacillus thuringiensis* Cyt2Aa2 toxin in binding and complex formation on lipid membrane
S. Bhattacharya, T. Das, A. Biswas, A. Gomes, A. Gomes and S.R. Dungdung	138	A cytotoxic protein (BF-CT1) purified from *Bungarus fasciatus* venom acts through apoptosis, modulation of PI3K/AKT, MAPKinase pathway and cell cycle regulation
X. Yang, Y. Wang, W.-H. Lee and Y. Zhang	151	Antimicrobial peptides from the venom gland of the social wasp *Vespa tropica*
J. Guo, X. Pan, Y. Zhao and S. Chen	158	Engineering Clostridia Neurotoxins with elevated catalytic activity
E.S. Costa, O.J. Faiad, R.G. Landgraf, A.K. Ferreira, P. Brigatte, R. Curi, Y. Cury and S.C. Sampaio	167	Involvement of formyl peptide receptors in the stimulatory effect of crotoxin on macrophages co-cultivated with tumour cells
M. Berger, W.O. Beys-da-Silva, L. Santi, I.M. de Oliveira, P.M. Jorge, J.A.P. Henriques, D. Driemeier, M.A.R. Vieira and J.A. Guimarães	179	Acute *Lonomia obliqua* caterpillar envenomation-induced physiopathological alterations in rats: Evidence of new toxic venom activities and the efficacy of serum therapy to counteract systemic tissue damage
M.A. Abdel-Rahman, V. Quintero-Hernandez and L.D. Possani	193	Venom proteomic and venomous glands transcriptomic analysis of the Egyptian scorpion *Scorpio maurus palmatus* (Arachnida: Scorpionidae)
A. Alvarez, Y. Montero, E. Jimenez, N. Zerpa, P. Parrilla and C. Malavé	208	IgY antibodies anti-*Tityus caripitensis* venom: Purification and neutralization efficacy
S. Ul-Hasan, D.M. Burgess, J. Gajewiak, Q. Li, H. Hu, M. Yandell, B.M. Olivera and P.K. Bandyopadhyay	215	Characterization of the peptidylglycine α-amidating monooxygenase (PAM) from the venom ducts of neogastropods, *Conus bullatus* and *Conus geographus*
Short Communication		
C.S. Almeida, A.C. Costa de Arruda, E. Caldas de Queiroz, H.T. Matias de Lima Costa, P.F. Barbosa, T.M. Araújo Moura Lemos, C.N. Oliveira, E. Pinto, A. Schwarz and P. Kujbida	127	Oral exposure to cylindrospermopsin in pregnant rats: Reproduction and foetal toxicity studies